CLAIMS

What is claimed is:

1. A radio unit for computer systems, comprising:

an integrated antenna system for receiving transmitted data information, said transmitted data information being transmitted within a commercial broadcast band;

a first radio receiver, said first radio receiver being coupled with said integrated antenna system, said integrated antenna system being capable of communicating said transmitted data information to said first radio receiver; and

an interface system for removably connecting said radio unit with a computer system, said first radio receiver being coupled with said interface system and being capable of communicating with said interface system.

2. The radio unit of Claim 1, wherein said integrated antenna system comprises a ferrite core, a first set of windings, and a second set of windings, said ferrite core having a circumference, a first region, and a second region, said first region being substantially opposite said second region and coupled with said second region at a junction, said first set of windings being wound substantially in a first direction about said circumference of said first region and being coupled with said ferrite core, said second set of windings being wound substantially in a second direction about said circumference of said second region, being coupled with said ferrite core, and being coupled with said first set of windings substantially at said junction, said first direction being substantially opposite said second direction such that a capacitance between said first set of windings and said second set of windings is reduced.

3. The radio unit of Claim 1, wherein said integrated antenna system includes an adjustable resonant frequency.

4. The radio unit of Claim 3, wherein said integrated antenna system has at least one set of windings, a ferrite core, a first varactor, and a second varactor, said ferrite core being disposed within said at least one set of windings, said at least one set of windings having a first end section and a second end section, said first varactor and said second varactor each having an anode and a cathode, said first end section being coupled with said anode of said first varactor, said second end section being coupled with said anode of said second varactor, said cathode of said first varactor and said cathode of said second varactor each being coupled with said interface system whereby said interface system controls said adjustable resonant frequency by applying a ferrite tuning voltage to said cathode of said first varactor and said cathode of said second varactor.

5. The radio unit of Claim 4, further comprising a controller, said interface system being coupled with said cathode of said first varactor, said cathode of said second varactor, and said first radio receiver each substantially via said controller, said controller receiving a signal strength at a first predetermined data frequency from said first radio receiver, comparing said signal strength against a first preselected criteria, being capable of generating a modified ferrite tuning voltage, and being capable of communicating said modified ferrite tuning voltage to said cathode of said first varactor and said cathode of said second varactor.

6. The radio unit of Claim 4, wherein the computer system receives a signal strength at a first predetermined data frequency from said first radio receiver via said interface system, compares said signal strength against a first preselected criteria, is capable of generating a modified ferrite tuning voltage, and is capable of communicating said modified ferrite tuning voltage to said cathode of said first varactor and said cathode of said second varactor via said interface system.

7. The radio unit of Claim 4, further comprising a controller, said interface system being coupled with said cathode of said first varactor, said cathode of said second varactor, and said first radio receiver each substantially via said controller, said controller receiving said transmitted data information at a first predetermined data frequency from said first radio receiver, generating a quality of said transmitted data information, comparing said quality of said transmitted data information against a second preselected criteria, being capable of generating a modified ferrite tuning voltage, and being capable of communicating said modified ferrite tuning voltage to said cathode of said first varactor and said cathode of said second varactor.

8. The radio unit of Claim 4, wherein the computer system receives said transmitted data information at a first predetermined data frequency from said first radio receiver via said interface system, generates a quality of said transmitted data information, compares said quality of said transmitted data information against a second preselected criteria, is capable of generating a modified ferrite tuning voltage, and is capable of communicating said modified ferrite tuning voltage to said cathode of said first varactor and said cathode of said second varactor via said interface system.

9. The radio unit of Claim 1, further comprising an antenna pre-amplifier, said integrated antenna system being coupled with said first radio receiver substantially via said antenna pre-amplifier.

10. The radio unit of Claim 1, wherein said first radio receiver is capable of communicating said transmitted data information to said interface system.

11. The radio unit of Claim 1, wherein the computer system includes a display, said display being capable of selectively visually presenting said transmitted data information in accordance with a preselected display criteria.

12. The radio unit of Claim 1, wherein said interface system includes a data memory system for storing said transmitted data information as stored data information such that, when the computer system is connected to said interface system, said stored data information is communicated to the computer system.

13. The radio unit of Claim 1, further comprising a controller, said interface system being coupled with said first radio receiver substantially via said controller.

14. The radio unit of Claim 1, further comprising a receiver memory system, said receiver memory system being coupled with said first radio receiver, being coupled with said interface system, and being capable of retaining at least one receiving parameter for said first radio receiver, said at least one receiving parameter being communicated to said receiver memory system by said interface system.

15. The radio unit of Claim 1, wherein said first radio receiver is capable of being powered down.

16. The radio unit of Claim 1, further comprising a second radio receiver for receiving transmitted audio information and an audio system for selectively audibly presenting said transmitted audio information, said second radio receiver being coupled with said integrated antenna system, said interface system, and said audio system.

17. The radio unit of Claim 16, further comprising an amplifier, said second radio receiver being coupled with said audio system substantially via said amplifier.

18. The radio unit of Claim 16, wherein said audio system includes at least one speaker, said at least one speaker being coupled with said second radio receiver.

19. The radio unit of Claim 16, wherein said audio system includes at least one audio jack, said at least one audio jack being coupled with said second radio receiver.

20. The radio unit of Claim 16, wherein said second radio receiver includes a receiver memory system 52 for retaining said at least one receiving parameter for said second radio receiver.

21. The radio unit of Claim 16, wherein said second radio receiver includes a receiver memory system for retaining a catalog having at least one preselected audio frequency, said receiver memory system being coupled with said second radio receiver and being capable of selectively communicating said at least one preselected audio frequency to said second radio receiver.

22. The radio unit of Claim 21, wherein said receiver memory system is coupled with, and is capable of communicating with, said interface system, and said catalog is capable of being modified via said interface system.

23. The radio unit of Claim 16, wherein said second radio receiver and said audio system each are capable of being powered down.

24. A method for receiving transmitted data information substantially via computer systems, said method comprising the steps of:

receiving transmitted data information substantially via a first radio receiver coupled to an integral antenna system;

communicating said transmitted data information from said first radio receiver to a computer system substantially via an interface system; and

selectively visually presenting said transmitted data information substantially via a display coupled with a computer system in accordance with a preselected display criteria.

25. The method of Claim 24, wherein the step of receiving transmitted data information includes the step of adjusting a resonant frequency of said antenna system by communicating a signal strength at a first predetermined frequency from said first radio receiver to said interface system, comparing said signal strength against a first preselected criteria, generating a modified ferrite tuning voltage, and communicating said modified ferrite tuning voltage to said antenna system.

26. The method of Claim 24, wherein the step of receiving transmitted data information includes the step of adjusting a resonant frequency of said antenna system by generating a quality of said transmitted data information, comparing said quality of said transmitted data information against a second preselected criteria, generating a modified ferrite tuning voltage, and communicating said modified ferrite tuning voltage to said antenna system.

27. The method of Claim 24 further comprising the step of configuring the first radio receiver to communicate with the computer system.

28. The method of Claim 24 further comprising the steps of:

communicating at least one receiving parameter for said first radio receiver to a computer system;

adjusting at least one of said at least one receiving parameter for said first radio receiver substantially via the computer system; and

communicating said at least one of said at least one receiving parameter from the computer system to said first radio receiver.

29. The method of Claim 27 further comprising the step of retaining said at least one of said at least one receiving parameter for said first radio receiver.

30. The method of Claim 24 further comprising the step of disconnecting said first radio receiver from the computer system.

31. The method of Claim 24 further comprising the steps of:

connecting a second radio receiver to the computer system; and

configuring the second radio receiver to communicate with the computer system

32. The method of Claim 31 further comprising the steps of:

communicating at least one receiving parameter for said second radio receiver to the computer system;

adjusting at least one of said at least one receiving parameter for said second radio receiver substantially via the computer system; and

communicating said at least one of said at least one receiving parameter from the computer system to said second radio receiver.

33. The method of Claim 32 further comprising the step of retaining said at least one of said at least one receiving parameter for said second radio receiver.

34. The method of Claim 31 further comprising the step of disconnecting said first radio receiver and said second radio receiver each from the computer system.

35. The method of Claim 24 further comprising the step of retaining said transmitted data information as stored data information.

36. The method of Claim 35 further comprising the steps of:

connecting said first radio receiver and said data memory system each to the computer system substantially via said interface system; and

communicating said stored data information the computer system.

37. The method of Claim 36 further comprising the step of selectively visually presenting said stored data information substantially via the computer system.

38. The method of Claim 24 further comprising the steps of:

retaining a catalog having at least one preselected audio frequency; and

selectively communicating said at least one preselected audio frequency to said second radio receiver.

39. The method of Claim 38 further comprising the step of modifying at least one of said at least one preselected audio frequency within said catalog.

40. The method of Claim 24 further comprising the step of powering down said first radio receiver.

41. The method of Claim 24 further comprising the step of powering down said second radio receiver and said audio system.

42. An integrated antenna system for receiving data information, comprising:

a ferrite core, said ferrite core having a circumference, a first region, and a second region, said first region being substantially opposite said second region and coupled with said second region substantially at a junction;

a first set of windings, said first set of windings being wound substantially in a first direction about said circumference of said first region and being coupled with said ferrite core; and

a second set of windings, said second set of windings being wound substantially in a second direction about said circumference of said second region, being coupled with said ferrite core, and being coupled with said first set of windings substantially at said junction, second direction being substantially opposite said first direction such that a capacitance between said first set of windings and said second set of windings is reduced.

43. The integrated antenna system of Claim 42, wherein said first set of windings and said second set of windings each have a first end section and a second end section, said first end section of said first set of windings being coupled substantially with said first region of said ferrite core, said first end section of said second set of windings being coupled substantially with said second region of said ferrite core, and said second end section of said first set of windings and said second end section of said second set of windings each being coupled with said junction of said ferrite core.

44. The integrated antenna system of Claim 43, wherein said first region of said ferrite core includes a first end portion, and said second region of said ferrite core includes a second end portion, said first end portion and said second end portion each being substantially opposite said junction, said first end section of said first set of windings being coupled substantially with said first end portion, said first end section of said second set of windings being coupled substantially with said second end portion.

45. The integrated antenna system of Claim 43, wherein said first end section of said first set of windings and said first end section of said second set of windings each are coupled with an antenna pre-amplifier.

46. The integrated antenna system of Claim 42, wherein said junction substantially bisects said ferrite core.

47. The integrated antenna system of Claim 42, wherein said circumference of said ferrite core is substantially uniform.

48. The integrated antenna system of Claim 42, wherein said ferrite core substantially comprises a rectangular prism.

49. The integrated antenna system of Claim 42, wherein said first set of windings and said second set of windings each substantially comprise copper tape.

50. The integrated antenna system of Claim 49, wherein said copper tape comprising said first set of windings has a first width, and said copper tape comprising said second set of windings has a second width, said first width being substantially equal to said second width.

51. The integrated antenna system of Claim 50, wherein a spacing between each of said first set of windings is substantially equal to said first width, and a spacing between each of said second set of windings is substantially equal to said second width.

52. The integrated antenna system of Claim 42, wherein a spacing between each of said first set of windings is substantially uniform, and a spacing between each of said second set of windings is substantially uniform.

53. The integrated antenna system of Claim 42, wherein said first set of windings and said second set of windings each comprise substantially two turns about said circumference.

54. A method for manufacturing an integrated antenna system for receiving data information, said method comprising the steps of:

forming a ferrite core, said ferrite core having a circumference, a first region, and a second region, said first region being substantially opposite said second region and being coupled with said second region substantially at a junction;

winding a first set of windings about said circumference of said first region substantially in a first direction;

winding a second set of windings about said circumference of said second region substantially in a second direction, said second direction being substantially opposite said first direction; and

coupling said first set of winding to said second set of winding substantially at said junction.

55. The method of Claim 54, wherein the step of forming a ferrite core further comprises the step of substantially bisecting said ferrite core with said junction.

56. The method of Claim 54, wherein the step of forming a ferrite core further comprises the step of forming said ferrite core with a substantially uniform circumference.

57. The method of Claim 54, wherein the step of forming a ferrite core further comprises the step of forming said ferrite core substantially in the shape of a rectangular prism.

58. The method of Claim 54, further comprising the steps of:

providing said first region of said ferrite core with a first end portion, said first end portion being substantially opposite said junction;

providing said second region of said ferrite core with a second end portion, said second end portion being substantially opposite said junction;

providing said first set of windings with a first end section and a second end section, said first end section begin substantially opposite said second end section;

providing said second set of windings with a first end section and a second end section, said first end section begin substantially opposite said second end section;

coupling said first end section of said first set of windings with said first end portion of said first region;

coupling said first end section of said second set of windings with said second end portion of said second region; and

coupling said second end section of said first set of windings to said second end section of said second set of windings and said ferrite core substantially at said junction.

59. The method of Claim 58, further comprising the step of coupling said first end section of said first set of windings and said first end section of said second set of windings each to an antenna pre-amplifier.

60. The method of Claim 54, wherein the step of winding a first set of windings further comprises the step of forming said first set of windings substantially from copper tape, and the step of winding a second set of windings further comprises the step of forming said second set of windings substantially from copper tape.

61. The method of Claim 54, further comprising the steps of creating a first substantially uniform spacing among each of said first set of windings and a second substantially uniform spacing among each of said second set of windings.

62. The method of Claim 61, wherein said first substantially uniform spacing is substantially equal to a width of each of said first set of windings, and said second substantially uniform spacing is substantially equal to a width of each of said second set of windings.

63. The method of Claim 62, wherein said width of each of said first set of windings is substantially equal to said width of each of said second set of windings.

64. The method of Claim 54, wherein the step of winding a first set of windings further comprises the step of forming substantially two turns about said circumference of said first region, and the step of winding a second set of windings comprises the step of forming substantially two turns about said circumference of said second region.